

LAND APPLICATION OF BIOSOLIDS
MISTI GOODMAN

LO71 (FIELDS 01 – 4, 6 – 10)
LOUISA COUNTY, VIRGINIA
JULY 2011



Map revisions
9/8/15



June 5, 2012

Mr. Ed Stuart
Dept of Environmental Quality
Northern Virginia Regional Office
13901 Crown Court
Woodbridge, VA 22193

Dear Mr. Stuart:

Transmitted herein for your consideration is land application site for Misti Goodman (designated as LO 71, fields 1-4, 6-10), located in Louisa County, Virginia. This submission contains strictly site specific information. Please refer to the operations and maintenance manual submitted under separate cover for all non-site specific information.

Do not hesitate to contact me at (804) 443-2170 should you have any questions or require additional information.

Sincerely,

A handwritten signature in blue ink that reads "Kelly M. Love". The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

Kelly M. Love
Technical Services Director

KML/cmw



FIELD SUMMARY SHEET

Mistie Goodman

LO 71

| SYNAGRO FIELD # | GROSS ACRES | NET ACRES | FSA TRACT # | OWNER |
|-----------------------|----------------|--------------|-------------------|-----------------------------------|
| 1 | 51.6 | 49.3 | | Mistie D & Christopher D. Goodman |
| 2 | 20.7 | 20.5 | | Mistie D & Christopher D. Goodman |
| 3 | 28.7 | 28.6 | | Mistie D & Christopher D. Goodman |
| 4 | 16.5 | 16.5 | | Carl A. Terrell |
| 6 | 59.8 | 59.8 | | Carl A. Terrell |
| 8 | 25.4 | 25.4 | | Mistie D & Christopher D. Goodman |
| 9 | 24.5 | 24.5 | | Mistie D & Christopher D. Goodman |
| 10 | 25.1 | 25.1 | | Mistie D & Christopher D. Goodman |
| | | | | |
| TOTALS: | 252.3 | 249.7 | | |

**VIRGINIA POLLUTION ABATEMENT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This biosolids/industrial residuals land application agreement is made on 12/28/11 between Ms. Goodman referred to here as "Landowner", and Synagro referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

I am the registered owner of real property known as Lo-71, located in Louisa Co, Virginia, which includes the agricultural sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

| <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> |
|----------------------|----------------------|----------------------|----------------------|
| <u>75-38</u> | | | |
| <u>75-65</u> | | | |
| <u>75-66</u> | | | |

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☒ I am the sole owner of the properties identified herein.
☐ I am one of multiple owners of the properties identified herein.

In the event that I, the landowner, sell or transfer all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, I shall:

1. Notify the purchaser of the applicable public access and crop management restrictions no later than the closing date; and
2. Notify the permit holder of the sale within two weeks following closing.

I have no other agreements for land application on the fields identified herein. I will notify the permittee immediately if conditions change such that the fields are no longer available to the permittee for application or any part of this agreement becomes invalid.

I hereby grant permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. I also grant permission for DEQ staff to conduct inspections on my land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance.

| | | | |
|---|---|---|---|
| <u>Class B biosolids</u> | <u>Water treatment residuals</u> | <u>Food processing waste</u> | <u>Other industrial sludges</u> |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Mistie S. Goodman
Landowner - Printed Name

Signature

Mailing Address

1528 Diggs Road Bumpass, VA 23024

Permittee:

Synagro, the permittee, agrees to apply biosolids and/or industrial residuals on the landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia. Permittee will provide a copy of the NMP to the landowner within 30 days after land application has commenced. If the plan requires modification to reflect the actual application rates or farming practices at the site, a revised plan will be provided within 2 weeks of the modification.

Permittee agrees to notify landowner or landowner designee of the proposed schedule for land application and specifically prior to any particular application to landowner's land. Notice shall include the source of residuals to be applied.

Madison Holsinger
Permittee - Authorized Representative
Printed Name

Signature

Mailing Address

Synagro
10647 Tidewater Trail
Champlain VA 22438

**VIRGINIA POLLUTION ABATEMENT APPLICATION
PART D-VI LAND APPLICATION AGREEMENT**

Page 2 of 2

Permittee: Synagro
Landowner: Mistie Goodman

Permit # or County: Louis
Farm name or address: Hawkins Creek Farm

Landowner Site Management Requirements:

I, the landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, at least 30 days after land application at that site was completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of biosolids or industrial residuals borne cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).


Landowner's Signature

12/28/11
Date

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 10/12/12 between Christopher Goodman referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Louisa, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

| <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> |
|----------------------|----------------------|----------------------|----------------------|
| <u>75-38</u> | | | |
| <u>75-65</u> | | | |
| <u>75-66</u> | | | |
| | | | |
| | | | |

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

| | | | |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <u>Class B biosolids</u> | <u>Water treatment residuals</u> | <u>Food processing waste</u> | <u>Other industrial sludges</u> |
| X Yes <input type="checkbox"/> No | X Yes <input type="checkbox"/> No | X Yes <input type="checkbox"/> No | X Yes <input type="checkbox"/> No |

| | | |
|---------------------------------|-------------------------------|----------------------|
| <u>Christopher D. Goodman</u> | <u>Christopher D. Goodman</u> | <u>1528 Diggster</u> |
| Landowner - Printed Name, Title | Signature | Mailing Address |
| | | <u>Bumpass, VA</u> |

Permittee:

Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with \$10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

| | |
|---------------------------------------|------------------------------|
| <u>LEE C. Rosson</u> | <u>10647 Tidewater Trail</u> |
| Permittee - Authorized Representative | Champlain, VA 22438 |
| Printed Name | Mailing Address |
| | |

Permittee: Synagro County or City: Louisa
 Landowner: Christopher D. Goodman

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Christopher D. Goodman
 Landowner's Signature

10/12/12
 Date

20 71

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/13/13 between Carl A. Terrell referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Louisa, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

| <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> | <u>Tax Parcel ID</u> |
|----------------------|----------------------|----------------------|----------------------|
| <u>75-27</u> | | | |
| | | | |
| | | | |
| | | | |
| | | | |

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

| | | | |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <u>Class B biosolids</u> | <u>Water treatment residuals</u> | <u>Food processing waste</u> | <u>Other industrial sludges</u> |
| X Yes <input type="checkbox"/> No | X Yes <input type="checkbox"/> No | X Yes <input type="checkbox"/> No | X Yes <input type="checkbox"/> No |

CARL TERRELL Carl A. Terrell P.O. Bx207
Landowner - Printed Name, Title Signature Mailing Address Montpelier, Va. 23192

Permittee:

Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

LEE C. ROSSON Lee C. Rossion 10647 Tidewater Trail
Permittee - Authorized Representative Signature Mailing Address
Printed Name Champlain, VA 22438

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro County or City: Louisa
Landowner: Carl A. Terrell

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

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 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
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 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
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 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Carl A. Terrell
Landowner's Signature

11-13-13
Date

Tax ID Landowner Identification Sheet

| Landowner | Field # | Tax ID |
|----------------------------------|---------|-------------------|
| Mistie D & Christoper D. Goodman | 71-01 | 75-38, 75-65, 75- |
| Mistie D & Christoper D. Goodman | 71-02 | 75-38 |
| Mistie D & Christoper D. Goodman | 71-03 | 75-38 |
| Carl A. Terrell | 71-04 | 75-27 |
| Carl A. Terrell | 71-06 | 75-27 |
| Mistie D & Christoper D. Goodman | 71-08 | 75-65, 75-66 |
| Mistie D & Christoper D. Goodman | 71-09 | 75-65 |
| Mistie D & Christoper D. Goodman | 71-10 | 75-65 |

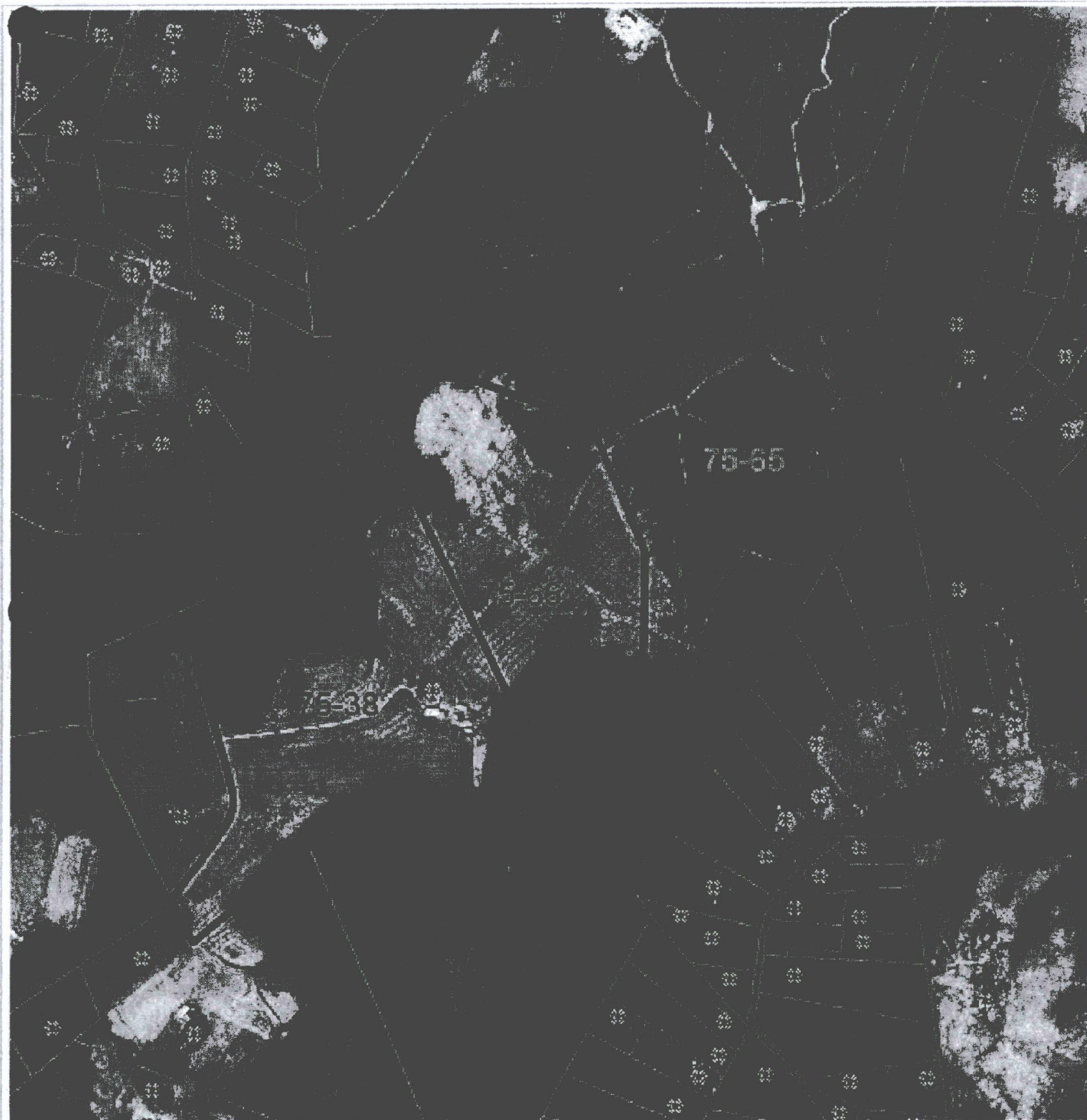
| Field # | Latitude (north) | Longitude (west) |
|---------|------------------|------------------|
| 71-01 | 37° 55' 53.37" | 77° 45' 49.08" |
| 71-02 | 37° 55' 49.51" | 77° 46' 03.20" |
| 71-03 | 37° 55' 38.55" | 77° 46' 12.34" |
| 71-04 | 37° 55' 12.93" | 77° 47' 02.86" |
| 71-06 | 37° 55' 38.84" | 77° 47' 07.91" |
| 71-08 | 37° 56' 03.78" | 77° 45' 44.85" |
| 71-09 | 37° 56' 01.27" | 77° 45' 38.15" |
| 71-10 | 37° 55' 52.57" | 77° 45' 33.15" |

Haul Route:

The Location maps in conjunction with the above latitude and longitude coordinates are a route planning tool meant to be a guide to indicate suggested haul routes for various preferences: to include but not limited to all federal, state, and local granted STAA access routes.



Tax Map ID 75-38, 65, 66



Scale: 1:18055.954822

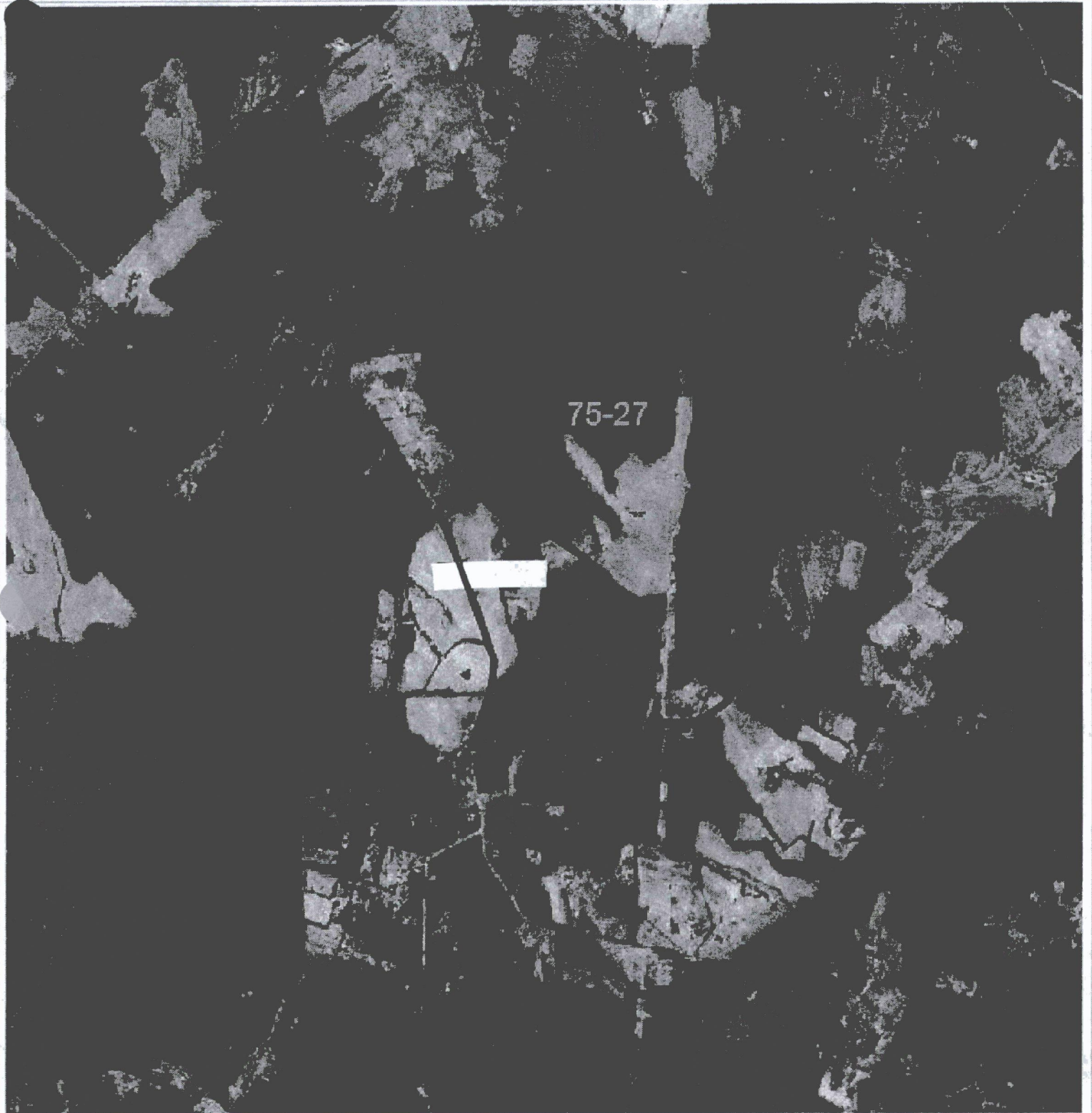
Date: 05/08/2012

Printed By:

A County assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or data provided herein. Please consult official County plats and records for official information.



Tax Map ID 75-27, 27B



Scale: 1:36111.909643

Date: 05/08/2012

Printed By:

a County assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or data provided herein. Please consult official County plats and records for official information.



Tax Map ID 75-38A, 38B



75-38B

75-38A

Scale: 1:9027.977411

Date: 05/08/2012

Printed By:

Loudoun County assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or data provided herein. Please consult official County plats and records for official information.

| Field | Map Unit | Acres | Percentage | Soil Series | High Water | Flood | Environmental Sensitive |
|-------|----------|-------|------------|-------------|------------|-------|-------------------------|
| 71-01 | CcB2 | 23.0 | 50 | | | | |
| 71-01 | CfC3 | 11.6 | 25 | | | | |
| 71-01 | ArC3 | 4.7 | 10 | | | | |
| 71-01 | AeB | 3.9 | 8 | | | | |
| 71-01 | AnB2 | 3.1 | 7 | | | | |
| 71-02 | CfC3 | 10.3 | 52 | | | | |
| 71-02 | CcB2 | 7.6 | 39 | | | | |
| 71-02 | AbB | 1.9 | 9 | | | | |
| 71-03 | CcB2 | 16.2 | 59 | | | | |
| 71-03 | AnC2 | 5.1 | 19 | | | | |
| 71-03 | CfC3 | 3.4 | 12 | | | | |
| 71-03 | CeB3 | 2.6 | 10 | | | | |
| 71-04 | AnB2 | 7.9 | 48 | | | | |
| 71-04 | AnC2 | 5.6 | 35 | | | | |
| 71-04 | ArC3 | 1.9 | 12 | | | | |
| 71-04 | WaC2 | 0.8 | 5 | | | | |
| 71-06 | AnB2 | 13.7 | 25 | | | | |
| 71-06 | CfC3 | 7.1 | 13 | | | | |
| 71-06 | AbB | 6.2 | 11 | | | | |
| 71-06 | CeB3 | 3.5 | 7 | | | | |
| 71-08 | CcB2 | 12.9 | 54 | | | | |
| 71-08 | CcC2 | 8.9 | 37 | | | | |
| 71-08 | AsC | 2.1 | 9 | Ashlar | | | Leaching |
| 71-09 | CcB2 | 11.2 | 48 | | | | |
| 71-09 | CcC2 | 10.6 | 46 | | | | |
| 71-09 | AsC | 1.4 | 6 | Ashlar | | | Leaching |
| 71-10 | CcC2 | 7.5 | 30 | | | | |
| 71-10 | AnC2 | 6.6 | 27 | | | | |
| 71-10 | AsC | 3.5 | 14 | Ashlar | | | Leaching |
| 71-10 | CO | 2.8 | 11 | | | | |
| 71-10 | AIB | 2.4 | 10 | | | | |
| 71-10 | CcB2 | 2.1 | 8 | | | | |

Environmentally Sensitive Areas

| Field | Reason for Sensitive Area |
|-------|---|
| 71-01 | None |
| 71-02 | None |
| 71-03 | None |
| 71-04 | None |
| 71-06 | None |
| 71-08 | Leaching Potential (Map Unit AsC – 9%) |
| 71-09 | Leaching Potential (Map Unit AsC – 6%) |
| 71-10 | Leaching Potential (Map Unit AsC – 14%) |

Louisa County Soils that are Environmentally Sensitive

| Soil Map Unit | Series Name | Time of year | | Environmental |
|---------------|-------------------|--------------|-------------|---------------|
| | | High Water | Flooded | |
| AsB, AsC, AsD | Ashlar | | | Leaching |
| AsC3, AsD3 | Ashlar | | | Leaching |
| AV | Ashlar | | | Leaching |
| Ch | Chewacla | Nov – April | Nov – April | |
| CIB | Colfax | Nov – June | | |
| Eb | Elbert | Nov – May | | |
| FN | Fluvaquents | Nov – April | Nov – April | |
| Fo | Forestdale | Jan – April | Jan – April | |
| FrB | Fork | Oct – May | Oct – May | |
| IdB | Iredell | Dec – April | | |
| IdB2, IdC2 | Iredell | Dec – April | | |
| IrA, IrB | Iredell | Dec – April | | |
| Iv | Iredell | Dec – April | | |
| LgB | Lignum | Dec – May | | |
| MnB, MnC, MnD | Madison | | | Shallow |
| MoC, MoD | Madison | | | Shallow |
| SeB, SeC, SeD | Sekil | | | Leaching |
| SeC3 | Sekil | | | Leaching |
| SP | Sekil | | | Leaching |
| To | Tocca | | Jan – Dec | |
| Ts | Tocca | | Jan – Dec | |
| We | Wehadkee | Nov – May | Nov – June | |
| WH | Wehadkee-Chewacla | Nov – May | Nov – June | |
| WoB | Worsham | Nov - May | | |

MAP LEGEND



House/Dwelling with a well



Rock Outcrop



Well



Lake/Pond



Slope which exceeds 15%



Intermittent Stream



Stream/River



Agricultural/Drainage Ditch



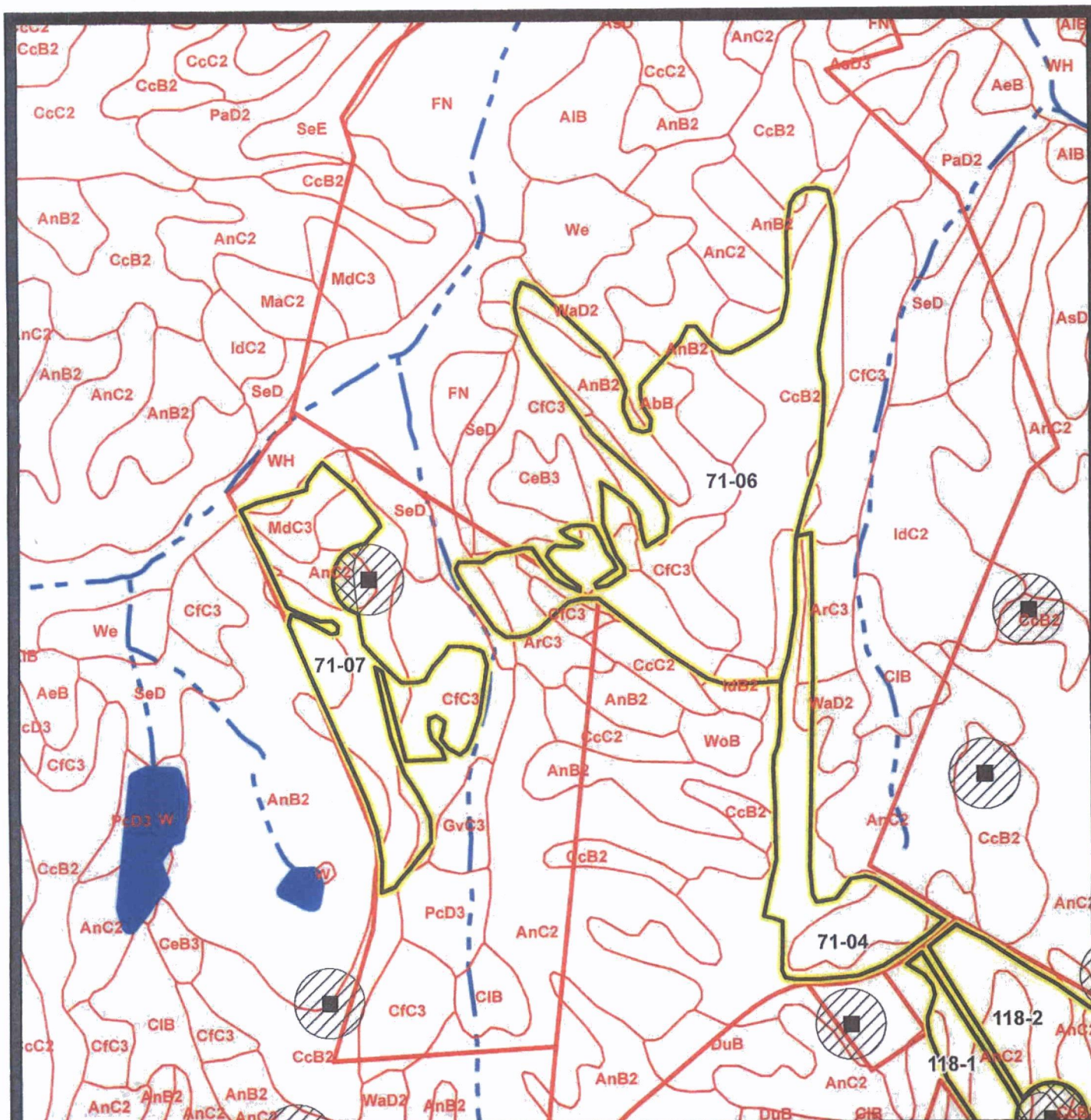
Field boundary



Property Line – (Standard 100'
Buffer, unless waiver issued)

Revised: Jan. 13, '14



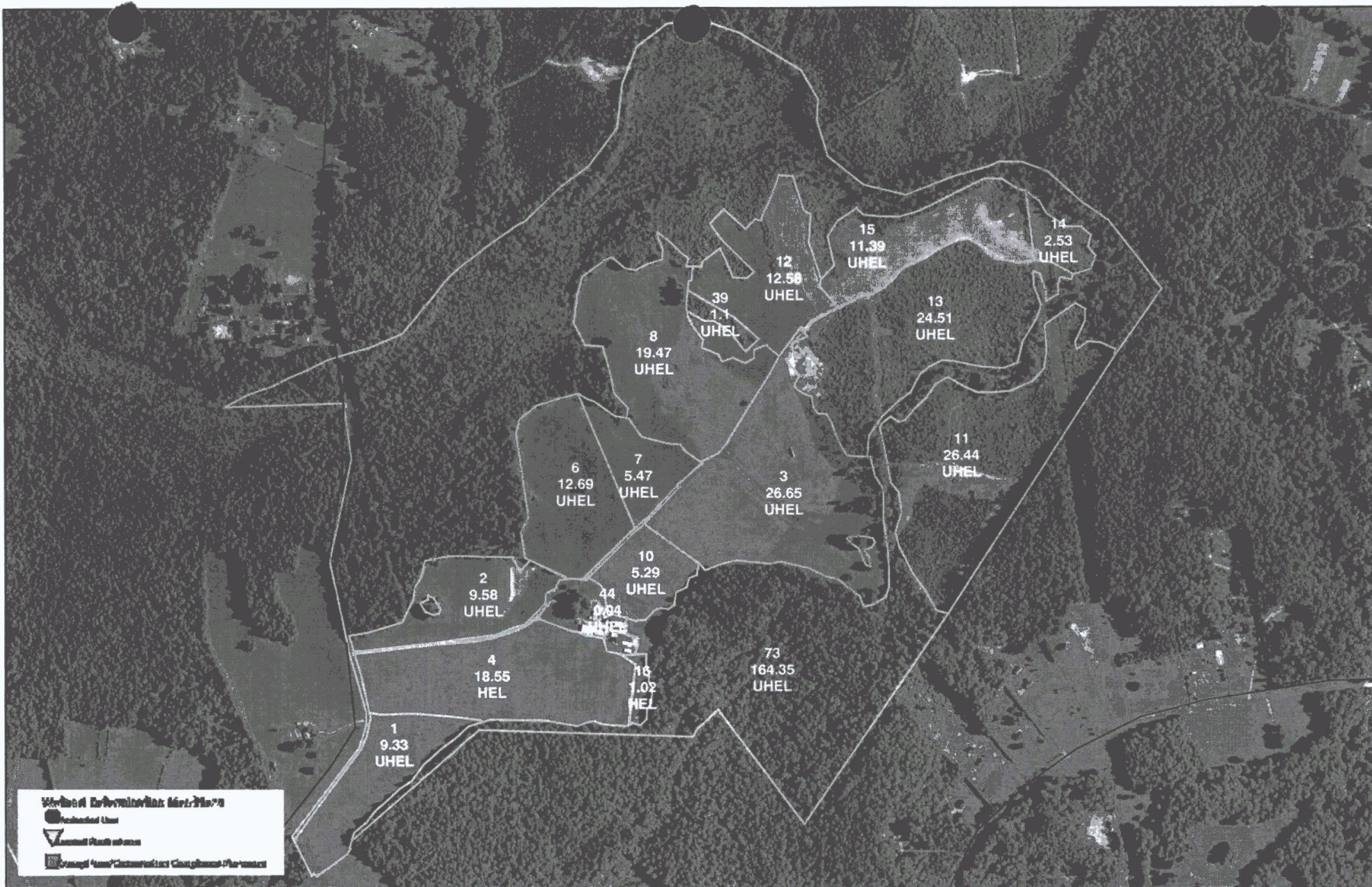


SCALE 1:10,000

REVISED 9-8-15

SOIL MAP





1 inch equals 792 feet

0 385 770 1,540 2,310 3,080 Feet

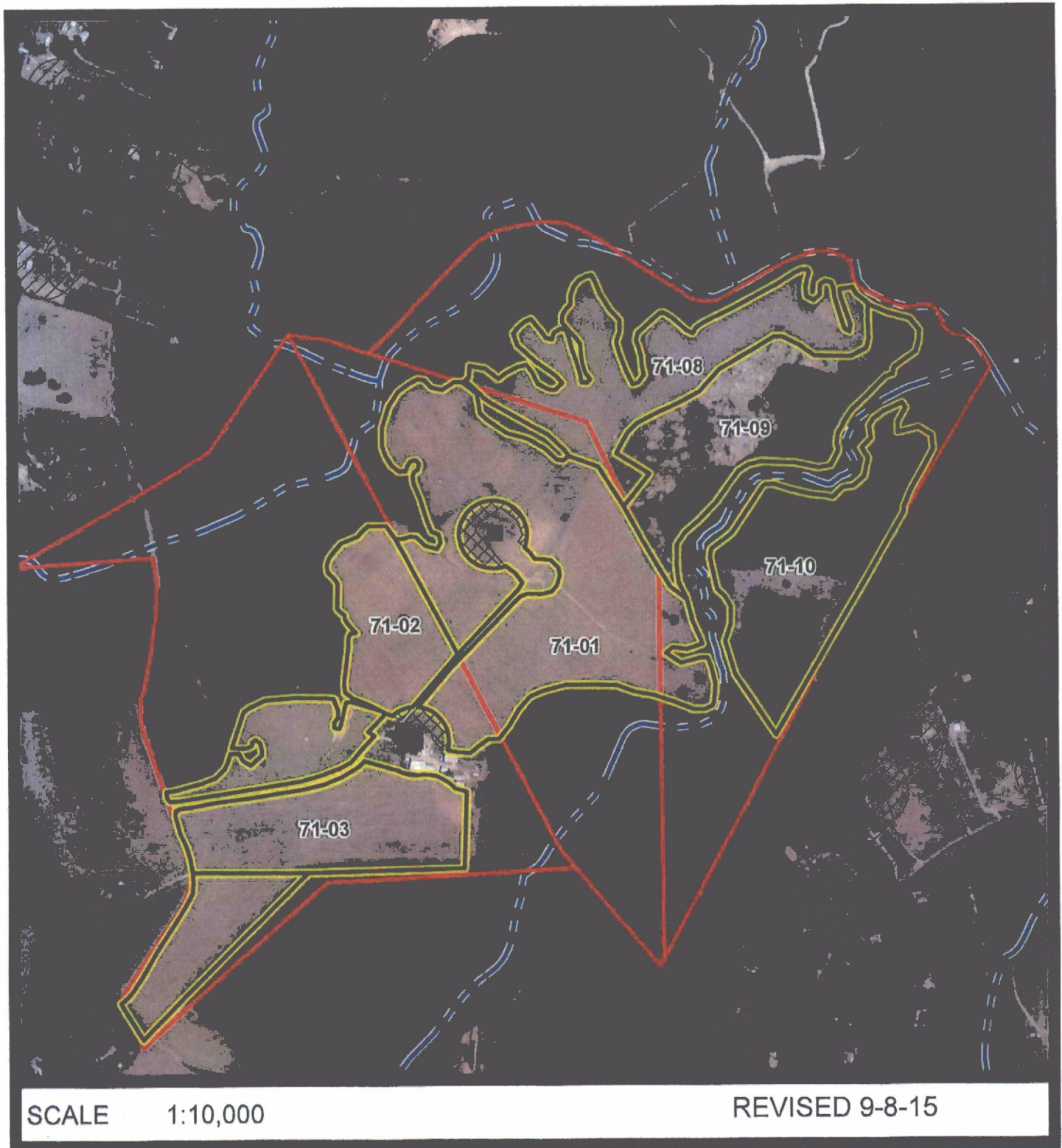
Goodman Tract

Farm: ²³⁹³22393 USDA **FSA**
Tract: 25222

Louisa County, VA

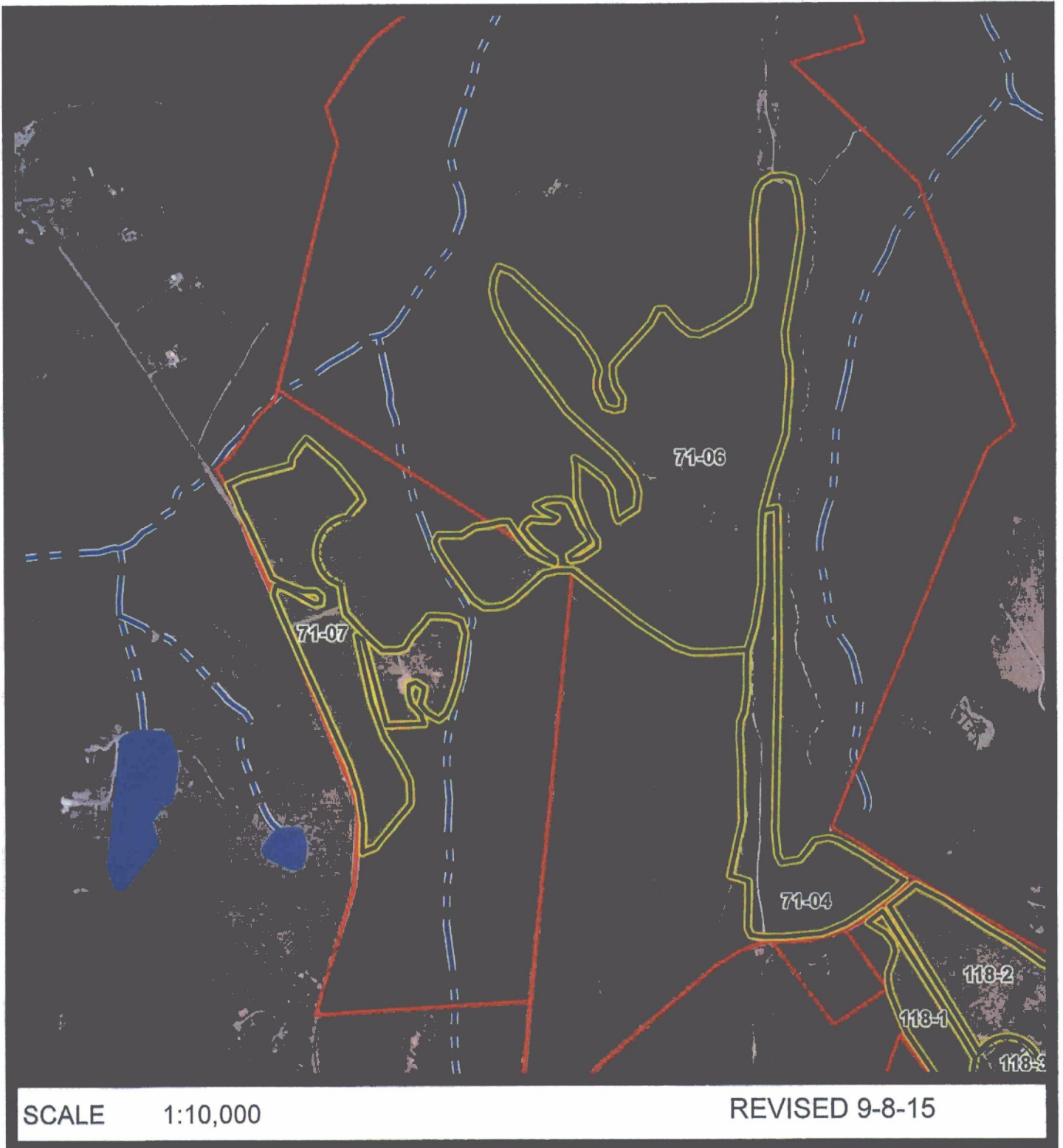
Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

January 19, 2012



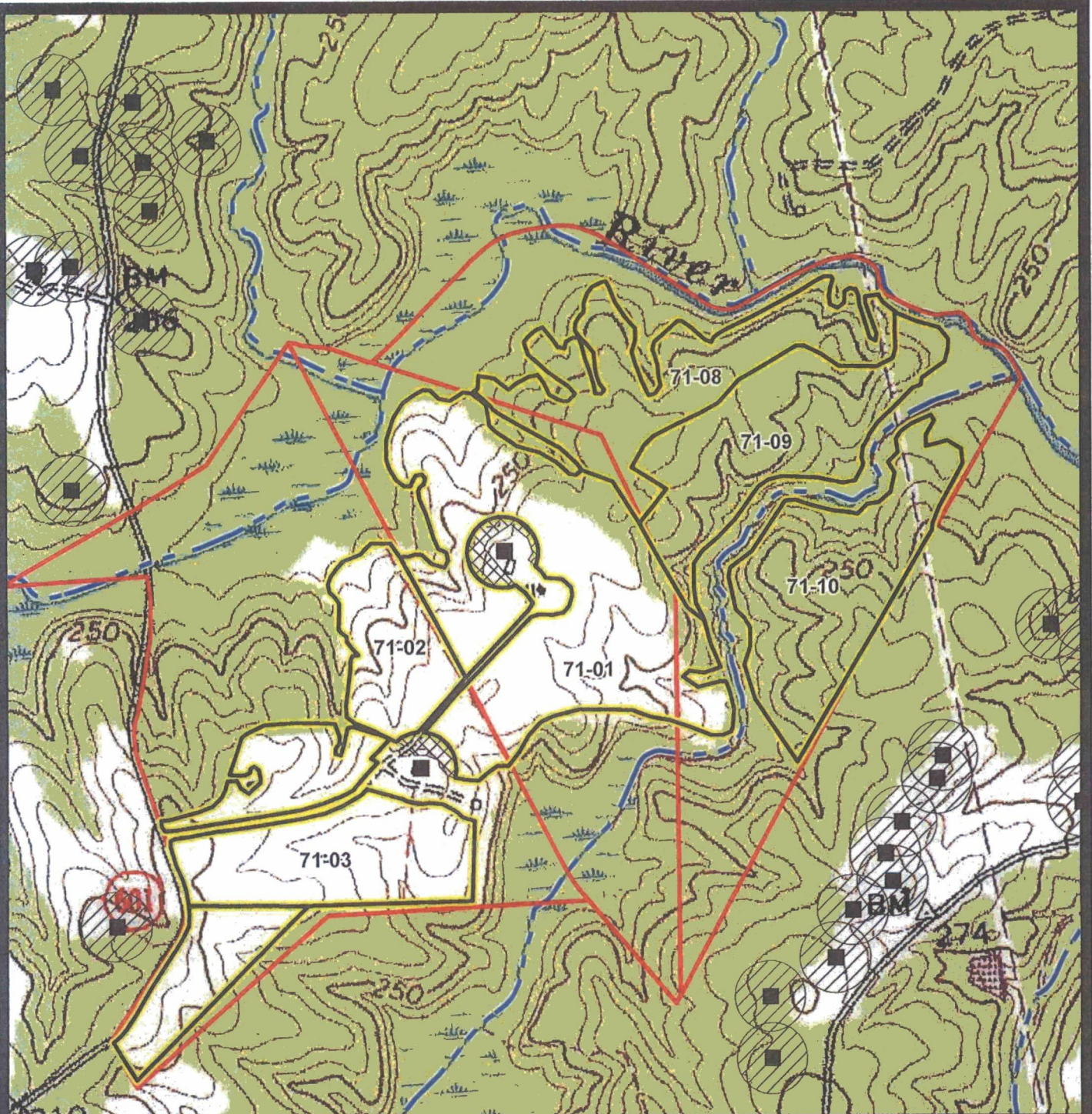
AERIAL MAP





AERIAL MAP



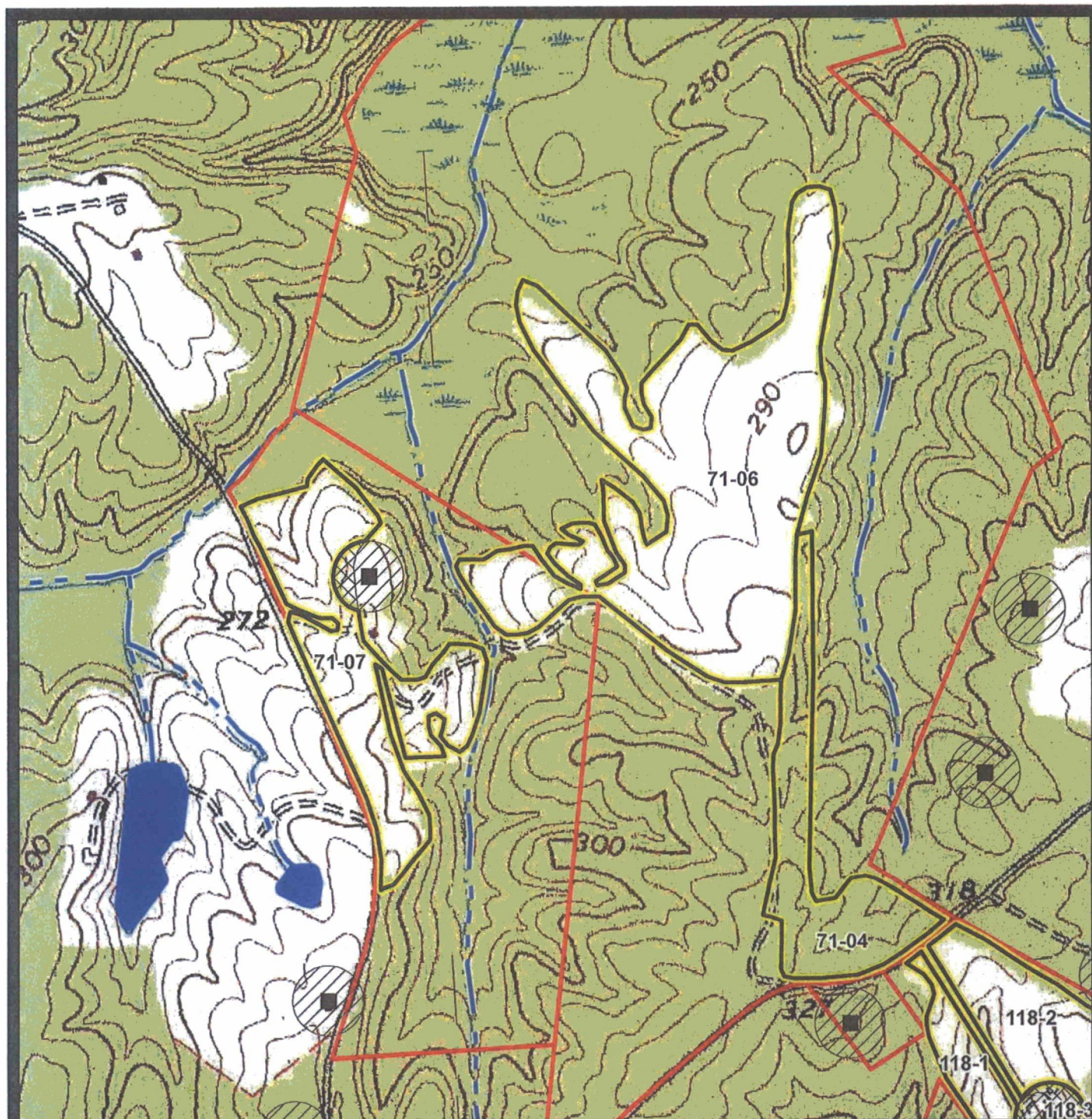


SCALE 1:10,000

REVISED 9-8-15

TOPO MAP



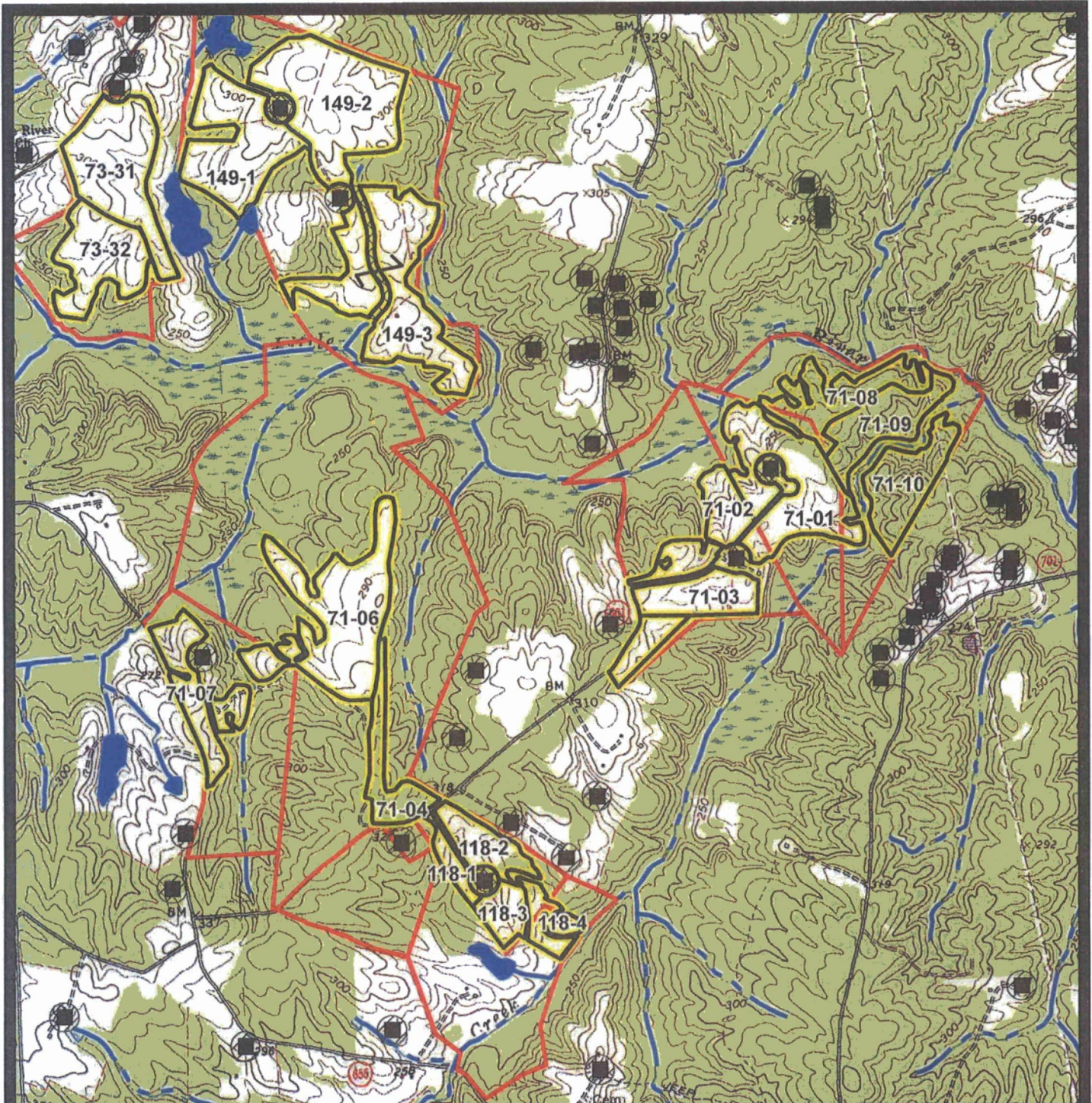


SCALE 1:10,000

REVISED 9-8-15

TOPO MAP



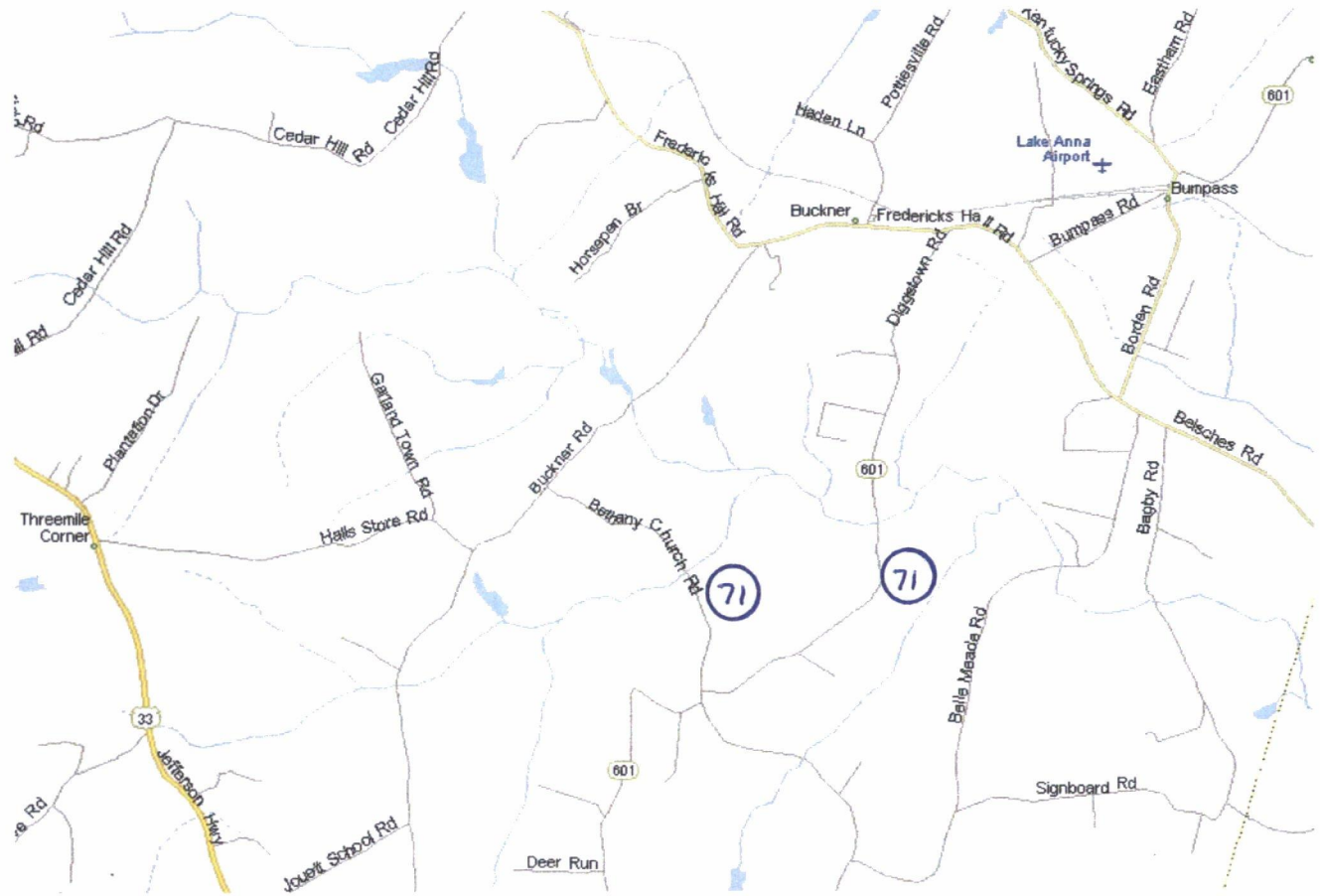


SCALE 1:24,000

REVISED 9-8-15

TOPO MAP





LOCATION MAP

